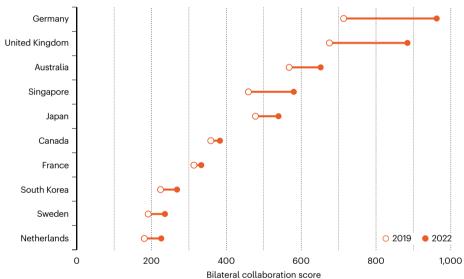
index

Tectonic shift

China's rapid rise in global science was an established trend, but the past few years – especially since the COVID-19 pandemic hit in 2020 – have seen new patterns emerging. International collaboration has fallen with some nations and research strengths are being spread among more Chinese institutions. Data analysis by Bo Wu. Infographic by Simon Baker, Bec Crew and Tanner Maxwell.

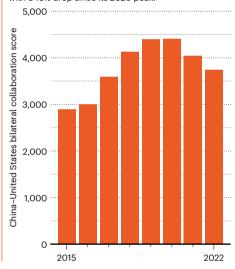
CLOSE PARTNERS

China's strongest partners after the United States (see 'Out of favour') all increased their collaborative output with China between 2019 and 2022, but some recorded a dip in 2021. Singapore replaced Japan in 2021 as China's fifth strongest collaborative partner.



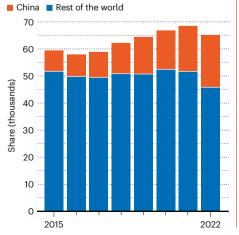
OUT OF FAVOUR

The United States' most productive partnership is with China, however their collaborative output has dropped by 15% since 2020. A similar trend is seen for Canada, China's seventh largest collaborative partner, with a 13% drop since its 2020 peak



LION'S SHARE

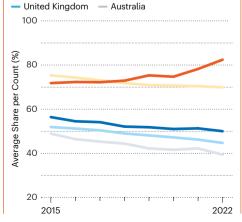
From 2015 to 2021, China's growing Share in the Nature Index seems to have added to total global Share, In 2022, however, there was a significant drop in Share from the rest of the world, meaning that China's research is taking up a higher proportion of total global Share.



LOCAL TALENT

China's Share per Count, which measures the ratio of China-affiliated authors to each publication, increased significantly between 2020 and 2022 - a sign that the country's high-quality research is becoming more homegrown. COVID-19 restrictions on cross-border collaborations are likely to have been a factor.

China — United States — Germany



OUALITY CLUSTERS

The 10 leading Chinese institutions in 2022 accounted for one third of China's Share in the Nature Index, down from the 46% contribution made by the same institutions in 2015. In other nations, research concentration among the leading institutions in 2022 has stayed broadly the same.

